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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LY, ANH

ART UNIT PAPER NUMBER

2172

DATE MAILED: 05/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/788,459

Applicant(s)

MOLESKY, LORY DEAN

Examiner

Anh Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) #4.                      6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. Claims 1-32 are pending in this application.

#### ***Claim Objections***

2. Claims 14-22 and 24-32 are objected to because of the following informalities:

The first line of claims 14-22, "The method" replace with --A system for performing a method--; and the first line of claims 24-32, "The method" replace with --"A computer program product for performing a method--.

Appropriate corrections are required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5-10, 13, 17-23 and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,230,064 issued to Nakase et al. (herein Nakase).

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With respect to claim 1, Nakase discloses generating time labels by processing input data that includes time based data (time series data of sales (abstract, col. 1, lines 6-10); creating a multi-level data structure (col. 1, lines 46-51); storing the time labels in the multi-level data structure (time series database: see fig. 1, col. 4, lines 40-48); processing the multi-level data structure to refine the time labels (col. 5, lines 21-38); generating multi-level time labels from the time labels that are stored in the multi-level data structure (col. 5, lines 1-20); and labeling the time axis of a graph with multi-level time labels (col. 7, lines 32-46).

Nakase also discloses time based data and a multi-level data structure based on the time series data storing in the time series databases (see fig. 1 and col. 4, lines 40-63).

Nakase although teaches the time based data and multi-level data structure based on analysis events (col. 2, lines 14-32), the time information is not explicitly indicated.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the event for displaying or demonstrating the time and event sequence as taught by Nakase (col. 5, lines 25-55) because it would have made the method for reducing a quality of time series data to be analyzed as the event (col. 2, lines 16-18) in the graph visualizations by demonstration environment.

With respect to claim 5, Nakase discloses (a) creating an initial set of time labels; (b) determining whether the initial set of time labels will fit along the time axis and if the initial set of time labels fits along the time axis proceeding to step (g); (c) creating an

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abbreviated set of time labels; (d) determining whether the abbreviated set of time labels will fit along the time axis and if the abbreviated set of time labels fits along the time axis proceeding to step (g); (e) creating a subset of time labels; (f) determining whether the subset of time labels will fit along the time axis and if the subset of time labels does not fit along the time axis proceeding to step (c); and (g) generating the set of time labels (starting time: see abstract, col. 4, lines 40-67; dividing the time or day into a plurality of period as subset of time: col. 4, lines 57-63 and col. 5, lines 26-67 and col. 6, lines 1-11).

With respect to claim 6, Nakase discloses summing the length of each time label in the initial set of time labels and an inter-label spacing constant; and comparing the sum with the length of the time axis (see abstract and col. 4, lines 40-63).

With respect to claim 7, Nakase discloses summing the length of each time label in the abbreviated set of time labels and an inter-label spacing constant; and comparing the sum with the length of the time axis (col. 5, lines 26-67 and col. 6, lines 1-11).

With respect to claim 8, Nakase discloses summing the length of each time label in the subset of time labels and an inter label spacing constant; and comparing the sum with the length of the time axis (dividing the time or day into a plurality of period as subset of time: col. 4, lines 57-63).

With respect to claim 9, Nakase discloses whereas the step of processing the multi-level data structure to refine the time labels comprises extending the precision of the time labels (col. 10, lines 7-16).

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With respect to claim 10, Nakase discloses whereas the step of processing the multi-level data structure to refine the time labels comprises merging the levels in the multi-level data structure (col. 5, lines 21-38).

Claim 13 is essentially the same as claim 1 except that it is directed to a system rather than a method (abstract, col. 1, lines 6-10; col. 1, lines 46-51; time series database: see fig. 1, col. 4, lines 40-48; col. 5, lines 21-38 and col. 5, lines 1-20; and col. 7, lines 32-46), and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 17 is essentially the same as claim 5 except that it is directed to a system rather than a method (starting time: see abstract, col. 4, lines 40-67; dividing the time or day into a plurality of period as subset of time: col. 4, lines 57-63 and col. 5, lines 26-67 and col. 6, lines 1-11), and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 18 is essentially the same as claim 6 except that it is directed to a system rather than a method (starting time: see abstract, col. 4, lines 40-67), and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 19 is essentially the same as claim 7 except that it is directed to a system rather than a method (col. 5, lines 26-67 and col. 6, lines 1-11), and is rejected for the same reason as applied to the claim 7 hereinabove.

Claim 20 is essentially the same as claim 8 except that it is directed to a system rather than a method (dividing the time or day into a plurality of period as subset of time:

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col. 4, lines 57-63), and is rejected for the same reason as applied to the claim 8 hereinabove.

Claim 21 is essentially the same as claim 9 except that it is directed to a system rather than a method (col. 10, lines 7-16), and is rejected for the same reason as applied to the claim 9 hereinabove.

Claim 22 is essentially the same as claim 10 except that it is directed to a system rather than a method (col. 5, lines 21-38), and is rejected for the same reason as applied to the claim 10 hereinabove.

Claim 23 is essentially the same as claim 1 except that it is directed to a computer program product rather than a method (abstract, col. 1, lines 6-10; col. 1, lines 46-51; time series database: see fig. 1, col. 4, lines 40-48; col. 5, lines 21-38 and col. 5, lines 1-20; and col. 7, lines 32-46), and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 27 is essentially the same as claim 5 except that it is directed to a computer program product rather than a method (starting time: see abstract, col. 4, lines 40-67; dividing the time or day into a plurality of period as subset of time: col. 4, lines 57-63 and col. 5, lines 26-67 and col. 6, lines 1-11), and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 28 is essentially the same as claim 6 except that it is directed to a computer program product rather than a method (starting time: see abstract, col. 4, lines 40-67), and is rejected for the same reason as applied to the claim 6 hereinabove.

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Claim 29 is essentially the same as claim 7 except that it is directed to a computer program product rather than a method (col. 5, lines 26-67 and col. 6, lines 1-11), and is rejected for the same reason as applied to the claim 7 hereinabove.

Claim 30 is essentially the same as claim 8 except that it is directed to a computer program product rather than a method (dividing the time or day into a plurality of period as subset of time: col. 4, lines 57-63), and is rejected for the same reason as applied to the claim 8 hereinabove.

Claim 31 is essentially the same as claim 9 except that it is directed to a computer program product rather than a method (col. 10, lines 7-16), and is rejected for the same reason as applied to the claim 9 hereinabove.

Claim 32 is essentially the same as claim 10 except that it is directed to a computer program product rather than a method (col. 5, lines 21-38), and is rejected for the same reason as applied to the claim 10 hereinabove.

5. Claims 2, 4, 14, 16, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,230,064 issued to Nakase et al. (herein Nakase) in view of US Patent No. 6,421,828 issued to Wakisaka et al. (herein Wakisaka).

With respect to claim 2, Nakase discloses a method of automatically labeling a time axis of a graph as discussed in claim 1.

As to the limitation, "assigning indexes to each of the time labels in the multi-level data structure," Nakase does not explicitly indicate that the indexing of the time.



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However, Wakisaka discloses index table containing a slot number representing the time (col. 5, lines 15-25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nakase with the teachings of Wakisaka so as to obtain a method that has a display controller for displaying a graph by a program using of one the axis as time axis (Wakisaka - col. 2, lines 14-28). This combination would provide the method for utilizing the event for displaying or demonstrating the time and event sequence as taught by Nakase (col. 5, lines 25-55) because it would have made the method for reducing a quality of time series data to be analyzed as the event (col. 2, lines 16-18) in the graph visualizations by demonstration environment.

With respect to claim 4, Nakase discloses a method of automatically labeling a time axis of a graph as discussed in claim 1.

As to the limitation, "assigning indexes to each of the time labels in the multi-level data structure," Nakase does not explicitly indicate that the indexing of the time.

However, Wakisaka discloses index table containing a slot number representing the time (col. 5, lines 15-25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nakase with the teachings of Wakisaka so as to obtain a method that has a display controller for displaying a graph by a program using of one the axis as time axis (Wakisaka - col. 2, lines 14-28). This combination would provide the method for utilizing the event for displaying or

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demonstrating the time and event sequence as taught by Nakase (col. 5, lines 25-55) because it would have made the method for reducing a quality of time series data to be analyzed as the event (col. 2, lines 16-18) in the graph visualizations by demonstration environment.

Claim 14 is essentially the same as claim 2 except that it is directed to a system rather than a method (col. 5, lines 15-25), and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 16 is essentially the same as claim 4 except that it is directed to a system rather than a method (col. 5, lines 15-25), and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 24 is essentially the same as claim 2 except that it is directed to a computer program product rather than a method (col. 5, lines 15-25), and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 26 is essentially the same as claim 4 except that it is directed to a computer program product rather than a method (col. 5, lines 15-25), and is rejected for the same reason as applied to the claim 4 hereinabove.

6. Claims 3, 11-12, 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,230,064 issued to Nakase et al. (herein Nakase) in view of US Patent No. 5,461,708 issued to Kahn.

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With respect to claim 3, Nakase discloses a method of automatically labeling a time axis of a graph as discussed in claim 1.

As to the limitation, "generating axis markers; and labeling the time axis of the graph with the axis markers," Nakase does not explicitly indicate that the axis marker.

However, Kahn discloses marker for the graphs or charts (col. 7, lines 38-44 and col. 11, lines 5-25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nakase with the teachings of Kahn so as to obtain a method for determining the level of complexity of a graph to be displayed (Kahn - col. 2, lines 60-67). This combination would provide the method for utilizing the event for displaying or demonstrating the time and event sequence as taught by Nakase (col. 5, lines 25-55) because it would have made the method for reducing a quality of time series data to be analyzed as the event (col. 2, lines 16-18) in the graph visualizations by demonstration environment

With respect to claim 11, Nakase discloses generating time labels; generating a multi-level data structure to store the time labels; populating the multi-level data structure with the time labels; refining the time labels in the multi-level data structure (time series data of sales (abstract, col. 1, lines 6-10; col. 1, lines 46-51; time series database: see fig. 1, col. 4, lines 40-48; col. 5, lines 21-38 and col. 5, lines 1-20).

As to the limitation, "generating axis markers; and labeling the time axis of the graph with the axis markers," Nakase does not explicitly indicate that the axis marker.

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However, Kahn discloses marker for the graphs or charts (col. 7, lines 38-44 and col. 11, lines 5-25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nakase with the teachings of Kahn so as to obtain a method for determining the level of complexity of a graph to be displayed (Kahn - col. 2, lines 60-67). This combination would provide the method for utilizing the event for displaying or demonstrating the time and event sequence as taught by Nakase (col. 5, lines 25-55) because it would have made the method for reducing a quality of time series data to be analyzed as the event (col. 2, lines 16-18) in the graph visualizations by demonstration environment.

With respect to claim 12, Nakase discloses whereas the time labels are multi-level time labels (col. 7, lines 32-46).

Claim 15 is essentially the same as claim 3 except that it is directed to a system rather than a method (col. 7, lines 38-44 and col. 11, lines 5-25), and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 25 is essentially the same as claim 3 except that it is directed to a computer program product rather than a method (col. 7, lines 38-44 and col. 11, lines 5-25), and is rejected for the same reason as applied to the claim 3 hereinabove.

**Contact Information**

7. Any inquiry concerning this communication should be directed to Anh Ly whose telephone number is (703) 306-4527 via E-Mail: **ANH.LY@USPTO.GOV**. The examiner can be reached on Monday - Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's supervisor, Kim Vu, can be reached on (703) 305-4393.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


or faxed to: (703) 746-7238 (after Final Communication and intended for entry)


or: (703) 746-7239 (for formal communications intended for entry)

or: (703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

AL/  
May 4<sup>th</sup>, 2003

  
HOSAIN T. ALAM  
PRIMARY EXAMINER